CLAIM AMENDMENTS

1. (canceled)

2. (currently amended) A DNAzyme which binds to GATA-3 mRNA and functionally inactivates it, which comprises:

- a catalytic domain with the nucleotide sequence GGCTAGCTACAACGA SEQ ID NO: 154 or a modified sequence with comparable biological effect, which cleaves the GATA-3 mRNA at every purine:pyrimidine binding site to which it is bonded,

- a right substrate binding domain adjoining the 3' end of the catalytic domain having polynucleotide sequence GTCTTGGAG and

- a left substrate binding domain adjoining the 5' end of the catalytic domain having polynucleotide sequence GTGGATGGA, both substrate binding domains being respectively complementary to two regions of the GATA 3 mRNA so that they hybridize with the mRNA, and

- which is active in vivo.

3. (previously presented) A DNAzyme according to claim 2, which comprises the sequence hgd 40 GTGGATGGA GGCTAGCTACAACGA GTCTTGGAG SEQ ID NO: 40.

4. (previously presented) A DNAzyme according to claim 2 which cleaves the catalytic domain of the GATA-3 mRNA at every purine:uracil binding site.

5. (previously presented) A DNAzyme according to claim 2 which is stabilized against decomposition within the organism by introduction of a 3'-3' inversion.

6. (previously presented) A DNAzyme according to claim 2 which is stabilized against decomposition within the organism by introduction of modified nucleotides or nucleotide compounds.

7. (previously presented) A DNAzyme according to claim 2 which includes an inverse thymidine on the 3' end and/or a FAM label on the 5' end.

8. (previously presented) A medicament containing a DNAzyme according to claim 2 and a pharmaceutically acceptable carrier.

Claims 9 through 16 (canceled).